

- (d) Free (surface) moisture
 (1) Coarse aggregate 0.00%
 (2) Fine aggregate 0.15%

Sieve analysis

(I) Coarse aggregate

IS Sieve sizes mm	Analysis of Coarse Aggregate Fraction, % Passing		Percentage Passing of Different Fractions			Percentage passing for graded aggregate as per Table II of IS 383-1970
	I	II	I	II	Combined	
	20mm	12.5mm	60%	40%	100%	
40	100.00	100.00	60.00	40.00	100.00	100
20	96.76	85.90	58.06	34.36	92.42	95-100
10	4.08	63.47	2.45	25.39	27.83	25-55
4.75	0.66	7.47	0.40	2.99	3.38	0-10

(II) Fine aggregate Conforming to grading Zone -II of Table 2

C. DESIGN COMPRESSIVE STRENGTH FOR MIX PROPORTIONING

$$f'_{ck} = f_{ck} + 1.65 \times S$$

Target average compressive strength in $N/mm^2 = 31.60$

Flexural strength using IS: 456 relationship 3.93